## IN THE SPECIFICATION

Please replace paragraph [0027] with the following rewritten paragraph:

[0027] In alternative configuration of the present invention, the modules are separated into four groups and are each operated 90 degrees out of phase. Figure 2 shows that the resulting raffinate flowrate varies between about 2,000 and 6,000, a ratio of about 3:1. This is roughly half the flowrate variation experienced in the first embodiment where two groups of modules operate 180 degrees out of phase, and one sixth the variation of the prior art methods. Although this flowrate variation reduction is impressive, it reduces the number of modules per group to two for the example of an eight module system. If one module must be repaired, the change in flowrate for he the other module in the group would be 100% during some cycle steps, a factor to be considered in designing the vessels and their interconnecting valves and flow conduits.

Please replace paragraph [0037] with the following rewritten paragraph:

[0037] Figure 4 shows that the sealing bosses 111 are provided with a concave internal form to aid in flow distribution from the outlet and inlet radial flow distributors 113 and 114. These may be a separate component as shown in Figure 4, or may be formed integrally with the manifold. The radial flow distributor is in fluid communication with a fluid channel 115 in the inlet manifold and fluid channel 116 in the outlet manifold. Flowing fluid from the channel 115 through the flow distributor 114 communicates with a chamber 120, and a chamber 121 communicates with the channel 116 through flow distributor 113. The chamber is defined by the concave feature of the sealing boss as well as the adsorbent

Application Serial No.: 10/615,244

Reply to Office Action dated December 23, 2004

retainer plate 122, which is supported by a snap ring 123. The PSA apparatus of Figures 3 and 4 is shown for the case with the inlet manifold on the bottom of the apparatus and the outlet manifold on the top. If the apparatus is mounted in the opposite direction, the snap ring 123 would be on the other side of the retainer plate.

Please replace paragraph [0038] with the following rewritten paragraph:

The retainer plate 122 may advantageously be supplied with a fine mesh layer 124 to retain small diameter adsorbent particles. This mesh layer may be made from wire mesh, woven or non-woven polymer, glass or other fabric. The mesh layer 124 and the retainer plate 122 are preferably assembled with a radial seal ring 125 which holds them together for assembly and provides a radial seal to present prevent bypassing of fluid or particles. Although this composite retainer assembly is preferred, other adsorbent support means may be used with equal success, such as metal, polymer or ceramic foams with an open structure, nonwoven mats, or other means apparent to one skilled in the art.

3